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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,321	08/31/2000	Shawn T Carolan	OPE-112	3901
7590		02/04/2005	EXAMINER	
Brertr C. Martin		PHILPOTT, JUSTIN M		
1650 Tyson Boulevard		ART UNIT		
Mclean, VA 22102		PAPER NUMBER		
		2665		

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/651,321	CAROLAN ET AL.	
	Examiner	Art Unit	
	Justin M Philpott	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed October 6, 2004 have been fully considered but they are not persuasive.
2. Specifically, applicant argues (pages 16-17) that Narasimhan does not disclose determining a plurality of conversion options ... each capable of converting the input file from a start data state to a final data state" as now recited in the newly amended claims. However, Narasimhan teaches such a limitation as discussed in the following office action.
3. Further, regarding claims 2 and 8, applicant argues (pages 17-18) that the intermediate conversion of Narasimhan does not disclose an intermediate conversion that can be used where direct conversions are not available for converting a file from a first state to a second state according to the discussion in applicant's specification. However, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an intermediate conversion that can be used where direct conversions are not available for converting a file from a first state to a second state according to the discussion in applicant's specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, applicant's argument is moot.
4. Still further, regarding claims 6 and 12, applicant argues (page 18) that the RESOURCE-MAX_DIGITS in Table 8 of Narasimhan cannot be dynamic. However, Narasimhan provides,

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“In step 55, the rates of available resources are checked to determine the lease cost resource using Table 8” (col. 7, lines 19-21). By requiring a separate step to examine the current values in Table 8 for determining resource availability, Narasimhan indicates that the available resources in Table 8 would be dynamic. Thus, applicant’s argument is not persuasive.

5. Also, regarding claim 23, applicant argues (pages 18-19) that the RESOURCE_PROVIDER_RATE in Table 8 of Narasimhan cannot be dynamic. However, as discussed above, Narasimhan provides, “In step 55, the rates of available resources are checked to determine the lease cost resource using Table 8” (col. 7, lines 19-21). By requiring a separate step to examine the current values in Table 8 for determining resource availability, Narasimhan indicates that the available resources in Table 8 would be dynamic. Thus, applicant’s argument is not persuasive.

6. Additionally, regarding claim 23, applicant continues arguing that the RESOURCE_PROVIDER_RATE in Table 8 of Narasimhan is not dependent upon the same dynamic considerations as described in applicant’s specification. However, in response to applicant’s argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., a rate dependent upon the same dynamic considerations as described in applicant’s specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, applicant’s argument is moot.

7. Finally, regarding claims 5 and 11, applicant argues (page 19) that CPU usage or memory usage in Narasimhan does not correlate to a static cost. However, a cost being a factor for

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considering the use of the resource, and a static cost being such a cost of a fixed amount, the fixed availability, or lack of a fixed availability, of CPU or memory usage implicitly is a static cost of operation. Accordingly, applicant's argument is not persuasive.

Specification

8. The attempt to incorporate subject matter into this application by reference (at page 16) to a document by Thomas H. Cormen et al., entitled "Introduction to Algorithms" is objected to because the reference has not been made available to the Examiner for consideration. With respect to incorporation by reference, the MPEP recites:

"The Director has considerable discretion in determining what may or may not be incorporated by reference in a patent application. *General Electric Co. v. Brenner*, 407 F.2d 1258, 159 USPQ 335 (D.C. Cir. 1968). The incorporation by reference practice with respect to applications which issue as U.S. patents provides the public with a patent disclosure which minimizes the public's burden to search for and obtain copies of documents incorporated by reference which may not be readily available. Through the Office's incorporation by reference policy, the Office ensures that reasonably complete disclosures are published as U.S. patents." MPEP 608.01(p).

While Patent Rule § 1.57(e) (effective October 21, 2004) authorizes Examiner to *require* Applicant to submit of a copy of the material incorporated even if properly incorporated, the instant application (having a filing date of August 31, 2000) pre-dates this Rule. However, Examiner respectfully requests Applicant to provide a copy of the above-mentioned reference which Applicant has relied upon to describe aspects of the instant invention.

Claim Objections

9. Claims 1 and 23 are objected to because of the following informalities: "one or more of the plurality of conversion nodes" (claim 1, lines 16-17) should be changed to "one or more of

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the ~~plurality of~~ conversion nodes” since reference is being made to the “one or more conversion nodes” (line 3) which is not the same as a “plurality of conversion nodes”, inherently comprising more than one conversion node; and “A least const” (claim 23, line 1) should be changed to “A least cost”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-4, 6-10, 12-24 and 26-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,597,688 to Narasimhan et al.

Regarding claim 1, Narasimhan teaches a system for converting an input file from a start data state to a final data state, comprising: one or more conversion nodes (e.g., outbound resource 31, see FIG. 2), each node (e.g., outbound resource 31) having executing thereon at least one conversion engine (e.g., processing resources 654 within communications server, see FIG. 6, and see col. 7, lines 30-34 regarding outbound resource 31 being equivalent to the communications server 150, or server 550 of FIGS. 5 and 6) for converting a file from a first data state (e.g., voice) to a second data state (e.g., fax or other data) (e.g., see col. 11, line 66 – col. 12, line 11 regarding processing units of server 550 in FIG. 6 are capable of receiving and transmitting according to a plurality of established protocols including having the capability to

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digitize voice and other audio data), each conversion engine (e.g., processing resource 654) having an associated cost (e.g., integrated within the resource cost considered by the processing server 19 to determine the least cost resource, see col. 3, line 14 – col. 4, line 21 and col. 7, lines 19-28) for performing a conversion of a file from the first data state (e.g., voice) to the second data state (e.g., fax or other data); a least cost conversion processor (e.g., processing server 19, see FIG. 2) to determine a plurality of conversion options (e.g., routes compared to determine the least cost route, see col. 3, line 14 – col. 4, line 21) for converting the file from the start data state (e.g., voice) to the final data state (e.g., fax or other data) using one or more of the conversion engines (e.g., processing resources 654, see col. 11, line 66 – col. 12, line 11), each conversion option (e.g., routes with associated cost) capable of converting the input file from the start data state (e.g., voice) to the final data state (e.g., fax or other data), and to determine a conversion cost (e.g., to determine least cost route, see col. 4, line 14 – col. 4, line 21) associated with each determined conversion option (e.g., routes with associated cost) using the costs associated with the conversion engines, and to determine a least cost conversion option from the determined plurality of conversion options (e.g., least cost route, see col. 3, line 23 – col. 4, line 3; table 8 in col. 6; and col. 7, lines 19-23); and means for transmitting the input file to one or more of the conversion nodes (e.g., outbound resource 31) in accordance with the determined least cost conversion option (e.g., see col. 3, line 24 – col. 4, line 3, and col. 7, lines 21-23).

Regarding claim 7, Narasimhan teaches a method for converting an input file from a start data state to a final data state, comprising: executing at least one conversion engine (e.g., processing resources 654 within communications server, see FIG. 6, and see col. 7, lines 30-34 regarding outbound resource 31 being equivalent to the communications server 150, or server

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550 of FIGS. 5 and 6) having a cost (e.g., integrated within the resource cost considered by the processing server 19 to determine the least cost resource, see col. 3, line 14 – col. 4, line 21 and col. 7, lines 19-28) for converting a file from a first data state (e.g., voice) to a second data state (e.g., fax or other data) (e.g., see col. 11, line 66 – col. 12, line 11 regarding processing units of server 550 in FIG. 6 are capable of receiving and transmitting according to a plurality of established protocols including having the capability to digitize voice and other audio data), determining a conversion cost (e.g., to determine least cost route, see col. 4, line 14 – col. 4, line 21) associated with each of a plurality of conversion options (e.g., routes with associated cost), each conversion option (e.g., routes with associated cost) capable of converting the input file from the start data state (e.g., voice) to the final data state (e.g., fax or other data); examining the determined conversion costs to identify a least cost conversion option (e.g., least cost route, see col. 3, line 23 – col. 4, line 3; table 8 in col. 6; and col. 7, lines 19-23); determining a conversion path associated with the identified least cost conversion option (e.g., least cost route); and transmitting the file according to the determined conversion path (e.g., least cost route) (e.g., see col. 3, line 24 – col. 4, line 3, and col. 7, lines 21-23).

Regarding claim 13, Narasimhan teaches a system for sending a file in a first data state from a sending message communicating device to a receiving message communicating device that receives the file in a second data state, comprising: a first process to determine the first and second data states (e.g., voice and fax or other data) (e.g., see col. 11, line 66 – col. 12, line 11 regarding processing units of server 550 in FIG. 6 are capable of receiving and transmitting according to a plurality of established protocols including having the capability to digitize voice and other audio data; and also see col. 12, line 24 – col. 14, line 27 regarding receiving and

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processing an incoming call); a least cost conversion processor (e.g., processing server 19, see FIG. 2) to determine one or more conversion options (e.g., routes compared to determine the least cost route, see col. 3, line 14 – col. 4, line 21) capable of converting the file from the first data state (e.g., voice) to the second data state (e.g., fax or other data) in accordance with the determined first and second data states (e.g., according to the determined corresponding protocols), the least cost conversion processor comprising: a second process to assign a conversion cost (e.g., integrated within the resource cost considered by the processing server 19 to determine the least cost resource, see col. 3, line 14 – col. 4, line 21 and col. 7, lines 19-28) to each of the one or more conversion options and select a conversion option having the least cost (e.g., see col. 4, line 14 – col. 4, line 21 regarding determining the least cost route); a third process to convert the file in accordance with the selected conversion option (e.g., see col. 13, lines 31-58); and a message distribution interface (e.g., outbound resource 31, see FIG. 2), for transmitting the message to the receiving message communicating device (e.g., see col. 3, line 14 – col. 4, line 21).

Regarding claim 18, Narasimhan teaches a method for sending a file in a first data state from a sending message communicating device to a receiving message communicating device that receives the file in a second data state, comprising: determining the first and second data states (e.g., voice and fax or other data) (e.g., see col. 11, line 66 – col. 12, line 11 regarding processing units of server 550 in FIG. 6 are capable of receiving and transmitting according to a plurality of established protocols including having the capability to digitize voice and other audio data; and also see col. 12, line 24 – col. 14, line 27 regarding receiving and processing an incoming call); determining one or more conversion options (e.g., routes compared to determine

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the least cost route, see col. 3, line 14 – col. 4, line 21) each of which is capable of converting the file from the first data state (e.g., voice) to the second data state (e.g., fax or other data) using the determined first and second data states (e.g., according to the determined corresponding protocols), comprising: assigning conversion costs (e.g., integrated within the resource cost considered by the processing server 19 to determine the least cost resource, see col. 3, line 14 – col. 4, line 21 and col. 7, lines 19-28) to the determined one or more conversion options; selecting the conversion option having the least cost (e.g., see col. 4, line 14 – col. 4, line 21 regarding determining the least cost route); converting the file in accordance with the selected conversion option (e.g., see col. 13, lines 31-58); and transmitting the converted file to the receiving message communicating device (e.g., see col. 3, line 14 – col. 4, line 21).

Regarding claim 23, Narasimhan teaches a least cost conversion processor (e.g., processing server 19, see FIG. 2) for converting a file from a first data state (e.g., voice) to a converted file having a second data state (e.g., fax or other data) in a least cost, comprising: means for obtaining static and dynamic cost data (e.g., see col. 7, lines 19-23 wherein resource provider rate, in combination with the other elements of table 8, comprises the total cost in order to determine the “least cost resource”, the total cost inherently comprising static and dynamic cost data) regarding a plurality of conversion engines (e.g., processing resources 654 within communications server) that can be used to convert the file from one data state to another data state (e.g., see col. 11, line 66 – col. 12, line 11 regarding processing units of server 550 in FIG. 6 are capable of receiving and transmitting according to a plurality of established protocols including having the capability to digitize voice and other audio data); a cost table (e.g., table 8, see col. 6) containing entries corresponding to the obtained costs (e.g., integrated within the

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resource cost considered by the processing server 19 to determine the least cost resource, see col. 3, line 14 – col. 4, line 21 and col. 7, lines 19-28) for the plurality of conversion engines (e.g., processing resources 654); means for determining a plurality of conversion options (e.g., routes compared to determine the least cost route, see col. 3, line 14 – col. 4, line 21) that are capable of converting the file from the first data state (e.g., voice) to the second data state (e.g., fax or other data) using one or more of the plurality of conversion engines (e.g., according to the determined corresponding protocols); means for assigning a cost (e.g., integrated within the resource cost considered by the processing server 19 to determine the least cost resource, see col. 3, line 14 – col. 4, line 21 and col. 7, lines 19-28) to each conversion option using the costs in the cost table (e.g., table 8) assigned to the conversion engines (e.g., corresponding to processing resources 654); a process to select the least cost conversion option from the determined conversion options as a selected conversion option (e.g., see col. 13, lines 31-58); and means for sending the file in the first data state to the conversion engines used by the selected conversion option (e.g., see col. 3, line 14 – col. 4, line 21).

Regarding claims 2 and 8, Narasimhan teaches the plurality of conversion options includes at least one option of having at least one intermediate conversion (e.g., see col. 15, lines 14-32).

Regarding claims 3, 9, 15, 20 and 28, Narasimhan teaches the least cost conversion processor calculates a routing and conversion costs associated with transmitting the input file or an intermediate file derived from the input file to one or more conversion nodes (e.g., outbound resource 31) for each of the plurality of conversion options (e.g., routes compared to determine the least cost route, see col. 3, line 14 – col. 4, line 21), and uses the calculated cost associated

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with transmitting the file (e.g., see RESOURCE_PROVIDER_RATE in table 8, and see col. 7, lines 19-23; also see col. 3, line 14 – col. 4, line 21 regarding transmitting).

Regarding claims 4, 10, 14, 19 and 24, Narasimhan teaches a cost table (e.g., table 8, see col. 6) having stored therein an estimate of static costs and dynamic costs associated with a particular conversion option (e.g., route) associated with a particular conversion engine (e.g., processing resources 654) (e.g., see col. 7, lines 19-23 wherein resource provider rate, in combination with the other elements of table 8, comprises the total cost in order to determine the “least cost resource”, the total cost inherently comprising static and dynamic cost data).

Regarding claims 6 and 12, Narasimhan teaches the dynamic costs include at least one of current CPU load, memory usage, and file I/O (e.g., RESOURCE_MAX_DIGITS, see table 8).

Regarding claims 16, 21 and 27, the creation of a new entry in the cost table (e.g., table 8) of Narasimhan inherently corresponds to an additional conversion engine (e.g., processing resource) added to the system for an intermediate conversion (e.g., see col. 13, lines 3-59).

Regarding claims 17, 22 and 26, Narasimhan teaches normalizing the costs stored in the table (e.g., table 8) that are assigned to the one of more conversion engines (e.g., in dollars per second, etc., see table 8).

Regarding claim 29, Narasimhan teaches means for receiving the converted file from the selected conversion engine (e.g., via Receiving Device Type 1-N coupled to resources 31, see FIG. 2).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan.

Regarding claims 5 and 11, Narasimhan teaches the system discussed above regarding claims 4 and 10, however, Narasimhan may not specifically disclose a static cost includes at least one of cycles required by a CPU to convert a file of a particular size using a particular conversion engine, and the bandwidth required to transmit a particular file.

However, Examiner takes official notice that it is well known in the art that a static cost in a system such as that of Narasimhan includes the bandwidth required to transmit a particular file. Accordingly, it would have been obvious to one of ordinary skill in the art to include the bandwidth required to transmit a particular file in the calculation of the static cost of the total cost calculations in the system of Narasimhan since it is well known in the art that a static cost in a system such as that of Narasimhan includes the bandwidth required to transmit a particular file.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin M Philpott



ALPUS H. HSU
PRIMARY EXAMINER